



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,278	07/11/2001	Philip M. Walker	10012790-1	9299

7590 09/19/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

TRAN, TONGOC

ART UNIT PAPER NUMBER

2134

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/903,278	Applicant(s) WALKER ET AL.	
	Examiner Tongoc Tran	Art Unit 2134	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on October 11, 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below. Claims 1-26 are pending.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17, 19-24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneier et al. (U.S. Patent No. 5,978,475).

Art Unit: 2134

In respect to claims 1, 10 and 19, Schneier discloses a system and method comprising:

a target; a probe operable to execute in the target and collect a predetermined set of data associated with the target; and a monitor operable to receive the collected predetermined set of data to compare with expected data values to determine whether the target has been altered (e.g. col. 6, line 41-col. 7, line 19, target, untrusted computer, monitor-trusted computer, a probe-audit log, "transmit it to the trusted computer for verification", "verification-the set of operations done on the logfile to guarantee that it hasn't been altered...", col. 7, lines 14-19).

In respect to claims 2, 11 and 20, Schneier further discloses wherein the probe is resident in the target (e.g. col. 7, lines 5-13).

In respect to claims 3, 12 and 21, Schneier further discloses wherein the monitor is operable to send the probe to the target for execution (e.g. col. 7, lines 5-6).

In respect to claims 4, 13 and 22, Schneier further discloses wherein the probe repeatedly executes and the predetermined set of data varies for each execution of the probe (e.g. col. 7, lines 7-8).

In respect to claim 5, Schneier further discloses wherein the predetermined set of data includes system attributes and system usage data (e.g. col. 1, lines 34-52 and col. 6, lines 51-64).

In respect to claims 6 and 15, Schneier further discloses wherein the probe is operable to calculate a signature value of at least a portion of an execution image of the probe (e.g. col. 8, line 45-col. 9, line 2).

In respect to claims 7 and 16, Schneier further discloses wherein the monitor is operable to compare the calculated signature value to an expected signature value (e.g. col. 8, line 45-col. 9, line 2).

In respect to claims 8, Schneier further discloses wherein the probe is operable to determine a signature value of a random subset of an execution image of the probe (e.g. col. 18, lines 23-28).

In respect to claims 9 and 17, Schneier further discloses wherein the probe is operable to generate an encryption key from the signature value for encrypting the collected predetermined set of data (e.g. col. 8, line 45-col. 9, line 2).

In respect to claims 19 and 26, Schneier further discloses receiving collected data encrypted by the probe using an encryption key derived from a self-hash value, the

Art Unit: 2134

data including system attribute data and system usage data; from a self-hash value, the data including system attribute data and system usage data; decrypting the encrypted data; and verifying the system attribute data (e.g. Col. 1, lines 34-52, col. 5, lines 5-20, col. 6, line 51-col. 7, line 19 and col. 8, line 45-col. 9, line 3).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 10 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hill et al. (U.S. Patent No. 6,088,804).

In respect to claims 1, 10 and 19, Hill discloses a system and method comprising:

a target; a probe operable to execute in the target and collect a predetermined set of data associated with the target; and a monitor operable to receive the collected predetermined set of data to compare with expected data values to determine whether the target has been altered (e.g. col. 3, lines 1-16, col. 4, lines 30-41, security agent-probe, security event-set of data items associated with the target, col. 5, lines 46-52, col. 4-22, node-target, agents send info. for collection and comparison).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier et al. (U.S. Patent No. 5,978,475).

In respect to claims 18 and 25, Schneier further discloses sending the encrypted data to a monitor, the data including system attribute data and system usage data; Decrypting the encrypted data using a decryption key; Verifying the system attribute data; and (e.g. Col. 1, lines 34-52 and col. 6, line 51-col. 7, line 19, col. 8, line 45-col. 9, line 3). Schneier does not disclose generating billing data based on the system usage data in response to the system attribute data being verified. However, Office Notice is taken that generating billing according to system usage is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement security audit logging and verifying operation taught by Schneier to generate billing according to the information for billing purposes.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

Art Unit: 2134


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-3962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Tongoc Tran  
Art Unit: 2134

TT

August 29, 2006

  
GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100